

Regulatory Impact Statement

Fencing of Swimming Pools Act 1987

Agency Disclosure Statement

This Regulatory Impact Statement (RIS) has been prepared by the Construction Market Policy team in the Ministry of Business, Innovation and Employment (MBIE).

The Fencing of Swimming Pools Act 1987 (the Act) helps to protect young children from drowning in home pools by requiring owners to fence certain pools.

This RIS assesses options for changing the Act to reduce compliance costs to pool owners and Territorial Authorities (councils) while maintaining the safety of young children.

There is considerable uncertainty surrounding the estimates contained in this RIS. This uncertainty arises from:

- few drownings per year in home pools, providing limited data with which to assess the effect of options on the risk of drowning
- unknown quantities, including (among others) the number of spa pools and garden ponds, and the average cost of fencing and of self-closing door mechanisms
- quantities that might be known if MBIE had gathered additional data (MBIE kept the scope of its data requests to data that we thought would be the most relevant)
- assumptions about behaviour change in response to the legislative changes, for example how buyers of spa pools and portable pools would respond to being informed about their obligations under the Act.

Given the uncertainty surrounding many of the estimates in this RIS, the estimates should generally be treated with caution. This is particularly the case where the estimates are a ratio of two uncertain numbers, such as estimates of the relative risk of drowning.

Despite this uncertainty in the estimates, they inform decision-making by indicating the direction and order of magnitude of the quantities being estimated.



Chris Bunny
General Manager, Construction and Housing Markets

13 November 2013

Table of Contents

Agency Disclosure Statement	1
Context	4
Status quo and problem definition	4
Objectives	8
Problem 1 – Doors opening to the pool area	9
Problem 2 – Monitoring and enforcing obligations under the Act.....	17
Problem 3 – Spa pools.....	23
Problem 4 – Portable pools.....	29
Problem 5 – Garden ponds and other water hazards	35
Consultation.....	41
Conclusions and recommendations	42
Implementation	44
Monitoring, evaluation and review	44
References	45

Context

- 1 In March 2013, MBIE published a consultation document, [Making Pool Safety Easier](#), containing proposals to reduce compliance costs associated with the Act while maintaining child safety (MBIE 2013a). The consultation document took into account the submissions in earlier consultation on issues with the Act (Department of Building and Housing 2008). In the foreword to the 2013 consultation document, the Minister for Building and Construction said:

“It’s time to review [the Act] to see if we can still achieve reduced drownings but also reduce some of the dreadful compliance costs. ...

This review is not about exposing young children to more risk of drowning, but is our chance to get more workable rules that are supported by pool owners, councils, and water safety groups.

... please ask yourself whether MBIE’s proposals strike an acceptable balance between protecting young children from drowning and the practicality of the rules for pool owners and councils. Remember there will always be a risk of drowning as long as we have swimming pools.”

Status quo and problem definition

The risk of drowning

- 2 The Act aims to promote the safety of young children by requiring owners to fence certain pools.
- 3 Young children (aged 0-4 years) are at risk of drowning in home swimming pools if there is nothing to restrict their access to the pool. Children have drowned after wandering to the pool, having left the sight of their caregiver who was briefly distracted. Sixty-five per cent of young children who drowned in home pools in New Zealand were with their caregivers inside the house before the children went unnoticed to the pool.¹
- 4 Caregivers should closely supervise children whenever they have access to a pool. A fence (or other means of restricting access) that is well-maintained and properly operated provides excellent protection from drowning as a result of brief lapses in supervision. There is strong scientific evidence that fencing is effective at reducing the drowning of young children in home pools (Thompson and Rivara 2010).
- 5 Most of the children who drowned outside at home in New Zealand were one year old, and 80 per cent of those who drowned were aged two or less. Most of the children (92 per cent) drowned at their own home or in a home where they were an invited guest. International research indicates that children are six times more likely to drown as a guest than at their own home (Orlowski and Cramer 2012). An Australian survey found that 66 per cent of pool owners had young children visiting or living in their home during the previous six months (Simmonds et al 2010).
- 6 In 1983, the Local Bills Committee inquired into the fencing of private swimming pools in New Zealand and found (among other things):
 - “[swimming pools] are a significant childhood water hazard
 - pool fencing is the most effective means of preventing drownings of pre-school children in private swimming pools
 - it is totally impossible for parents to supervise their children every minute of the day; ...”

¹ Drowning statistics in this RIS, unless otherwise stated, relate to fatalities of children aged 0-4 years who went unnoticed to a pool or outdoor water hazard at home between 1993 and 2012. Data from Water Safety New Zealand’s DrownBase.

- 7 The number of young children drowning in home pools has reduced from 100 drownings in the 10 years to 1982 (before the Act was introduced), to 30 drownings in the 10 years to 2012. In the last 20 years there have been almost no drownings in pools that complied with the Act.
- 8 The following table shows the pool type where young children drowned outside at home in New Zealand in the last twenty years. Two-thirds drowned in swimming pools, with the others drowning in spa pools, portable pools, garden ponds and other hazards.

Pool type	Estimated number	Young children drowned over 20 years		Risk of drowning relative to unfenced swimming pool
		Number	Percentage	
Swimming pools	60,000	56	68%	15%
Spa pools	100,000	9	11%	< 1%
Portable pools	200,000	4	5%	< 1%
Garden ponds	10,000 – 30,000	11	13%	10% – 20%
Other water hazards	Not estimated	2	2%	Not estimated
Total*	370,000 – 390,000	82	100%	NA

* Totals may not add due to rounding.

- 9 The number of pools and relative risk of drowning are uncertain. The following table summarises the uncertainty surrounding the estimated number of pools.

Pool type	Degree of certainty surrounding estimated number of pools
Swimming pools	Moderate certainty: The estimated number of swimming pools is based on council records of pools. MBIE received data relating to the Act from 62 councils. Of those councils, 45 provided data on the total number of pools, and 27 gave a breakdown between types of pool.
Spa pools	Uncertain: The estimated number of spa pools in New Zealand is based on advice from pool industry representatives.
Portable pools	Uncertain: The estimated number of portable pools is based on advice from retailers, and an assumption of average lifespan.
Garden ponds	Uncertain: The estimated number of garden ponds is based on the number of ponds deeper than 400mm that Auckland Council applies the Act to (450 ponds), and targeted surveys of garden ponds in Auckland and Rotorua lakes related to managing noxious weeds (Bay of Plenty Regional Council 2012, Champion and de Winton 2005).
Other water hazards	Not estimated: Examples of other water hazards outside at home are water tanks, septic tanks and stormwater detention ponds.

- 10 The following table summarises the uncertainty surrounding the risk of drowning in each pool type.

Pool type	Uncertainty surrounding the risk of drowning
Swimming pools	Moderate certainty: The estimate of risk uses 10 years of data because the number of drownings has fallen over the last 20 years, at the same time as an increasing number of councils have been periodically inspecting pools.
Spa pools	Uncertain: The estimate of risk uses 10 years of data because child-resistant covers have now become the industry norm. The low number of drownings in the last 10 years (almost none) creates uncertainty about the size of the risk.
Portable pools	Uncertain: The estimate of risk uses 20 years of data because we are unaware of any factor that would have significantly reduced the risk over that period. The low number of drownings (four in the last 20 years and none in the last 10 years) creates uncertainty about the size of the risk.
Garden ponds	Uncertain: The estimate of risk uses 20 years of data because we are unaware of any factor that would have significantly changed the risk over that period.

Requirements of the Act

- 11 The Act applies to pools that are:²
- man-made; and
 - capable of being used for swimming, wading, paddling, or bathing
- but not to pools that are:
- less than 400mm deep; or
 - with non-climbable sides more than 1.2m high; or
 - in a building principally used for something other than the pool; or
 - not associated with a home and not intended for swimming; or
 - supervised by paid employees (and locked when not).
- 12 The Act requires owners to notify their council that they have a pool, and to fence the pool (or fence the immediate pool area). Owners may use the wall of a building as part of the fence. The Schedule to the Act contains detailed specifications for doors, gates and fences. Pools and pool fences are buildings under the Building Act 2004, and must be installed in compliance with the Building Code. The Fencing of Swimming Pools Act allows councils to grant exemptions from the requirements of the Act.
- 13 The Act requires councils to take all reasonable steps to ensure that owners comply with the Act. Owners who do not comply can face court-imposed penalties, and on rare occasions owners have received criminal convictions after a child drowned in their pool.
- 14 Standards New Zealand developed New Zealand Standard NZS 8500:2006 *Safety Barriers and Fences around Swimming Pools, Spas and Hot Tubs*. The Standard was developed in conjunction with government, industry and safety representatives and with public consultation. The Standard is often referred to by councils when granting exemptions under the Act.

² The definition of pool and the exemptions are in sections 2 and 5 of the Act.

- 15 The following table shows the estimated number of pools subject to the Act, and the estimated number that are known to councils.

Pool type	Estimated total number of pools	Estimated number subject to the Act	Estimated number known to councils*
Swimming pools	60,000	60,000	60,000
Spa pools	100,000	100,000	20,000
Portable pools	200,000	60,000	1000
Garden ponds	10,000 – 30,000	1,500 – 4,000	450
Other water hazards	Not estimated	Not estimated	200
Total	370,000 – 390,000	221,500 – 224,000	81,650

* Adjusted for councils that we did not receive data about pools by using data from other councils.

- 16 The table shows that councils have identified an estimated 81,650 pools that are subject to the Act, including 60,000 swimming pools, 20,000 spa pools, 1000 portable pools, and 650 garden ponds and other water hazards.
- 17 Auckland has the most swimming pools (40 per cent of all pools), and the council area with the most swimming pools per head of population is Hastings District Council. The cost of fencing 60,000 pools is estimated to be \$400 million, and council inspections are estimated to cost \$3.5 million per year. The estimates in this RIS of the cost of fencing and of inspecting pools are based on limited data and are uncertain.

Problems with the Act

- 18 Overall, the Act is working well to reduce the risk of drowning. Some aspects of the Act have imposed compliance costs for pool owners without significantly reducing the risk of drowning. In some areas, the risk of drowning is not managed as well as in others. The key problems with the Act, highlighted by the public consultation, relate to:
- doors from the house to the pool area: the Act has allowed some doors that can be left open. Research has found that pools with doors have a much higher incidence of drowning than pools without direct door access (Barker et al 2008)
 - monitoring and enforcement: the obligations for councils to monitor pools are unclear, resulting in some councils frequently inspecting all pools while other councils have no periodic inspections
 - spa pools: spa pools can be child-resistant without a fence, and requiring fencing creates compliance costs without a significant further reduction in risk of drowning
 - portable pools: portable pools pose a drowning risk but it is impractical to install a permanent means of restricting access to a portable pool, and it is impractical for councils to enforce the requirement to install a means of restricting access
 - garden ponds and other water hazards: the Act has sometimes been applied to garden ponds deeper than 400mm and some other water hazards outside at home, leading to inconsistencies in the way the Act is administered, with potentially high costs to install a means of restricting access to large hazards.
- 19 These problems are each discussed in the following sections of this RIS.

Objectives

- 20 The principal objective of the review of the Act is to maintain the effectiveness of the Act in reducing drownings of young children, while reducing compliance and administrative costs for pool owners and councils.
- 21 This RIS uses the following criteria for assessing options:
- risk of drowning
 - compliance costs for pool owners
 - administrative costs for councils
 - certainty and consistency.
- 22 Although the RIS shows administrative costs separately, councils often pass the administrative costs on to pool owners through inspection fees and targeted rates. This helps to ensure the regime is adequately funded.
- 23 In this RIS, we assess the options against the status quo as follows:

Criterion	Positive aspect (✓)	Negative aspect (✗)
Risk of drowning	Reduces risk of drowning	Increases risk of drowning
Compliance costs for pool owners	Reduces compliance costs	Increases compliance costs
Administrative cost for councils	Reduces administrative costs	Increases administrative costs
Certainty and consistency	Reduces uncertainty for owners or councils about their obligations Reduces inconsistency in the way the risk of drowning is managed	Does not reduce areas of significant uncertainty Does not reduce instances of significant inconsistency

- 24 For each of the problems assessed in this RIS, we show the relative size of the impact of each option using a scale of ✓✓✓ to ✗✗✗.
- 25 These criteria are related. For example, certainty and consistency affect compliance costs and drowning risk as follows:

	Effect on risk of drowning	Effect on compliance and administrative costs
Certainty and consistency	Consistent application of the requirements helps to ensure that the risk of drowning is being managed for each pool.	Uncertainty about the requirements creates a risk that courts or coroners find owners or councils to be in breach of their obligations. People who are risk-averse would tend to incur costs to reduce uncertainty.

Problem 1 – Doors opening to the pool area

Status quo and problem definition

- 26 The wall of a house can be used to restrict access to the pool area. Doors from the house to the pool must comply with the Building Code (and installing the door in accordance with the Schedule to the Act is one way of complying):
- The Schedule to the Act requires doors to be self-closing, but clause 11 of the Schedule permits councils to grant exemptions if the requirement to make doors self-closing is impossible, unreasonable, or in breach of any other law.
 - The Building Code requires doors to restrict access. Determinations issued under the Building Act 2004 have found that this requires doors to be self-closing or have an alternative means to restrict access (Determination 2010/35 and 2009/76).
- 27 The courts have found that these requirements are inconsistent.³
- 28 International standards, and many overseas jurisdictions allow doors if they are self-closing or have a door alarm (ISPSC 2012). In NZS 8500:2006, the standard is for doors to be self-closing. In Australia, doors are prohibited from opening directly to the pool area. Australian states changed their regulations following research that found that pools with direct door access have three times more drownings than pools without direct door access (Barker et al 2003, Barker et al 2008).
- 29 Anecdotal evidence suggests that in New Zealand up to half of pools could involve a door opening to the pool area, and more than half of new pools installed each year have a door opening to the pool area.

³ [Waitakere City Council v Hickman CIV 2003-404-7266](#), at [50].

30 The problems with the status quo are set out in the following table.

Risk of drowning
<p>Doors that open directly to the pool area can significantly increase the risk of drowning. In New Zealand, 20 per cent of drownings involved a door that had been left open. Australian research found that the drowning rate is three times higher in pools with doors that open directly from the house to the pool area (Barker et al 2008). In Florida, US, doors failed to restrict access in 70 per cent of child drownings (Ragan et al 2006).</p> <p>We estimate that 7,000 existing pools have doors that are not self-closing, based on anecdotal evidence about the proportion of pools with direct door access, and the proportion of those doors that are self-closing.</p> <p>Technology for making doors self-closing has improved. Self-closing mechanisms are available for sliding doors.⁴ Alternative mechanisms for restricting access have also been developed, such as alarms that sound if people do not close doors after opening them.⁵</p>
Compliance costs
<p>Allowing doors to open to the pool area gives owners flexibility about how to restrict access to their pool. Self-closing mechanisms are not necessarily cheaper than fencing.</p>
Administrative costs
<p>The Act provides for councils to grant exemptions for doors that are not self-closing. The exemption process is time consuming and cumbersome because exemptions can only be granted by a committee of council and cannot be delegated to officials. To recover the cost of the exemption process, councils charge an average of \$336 for each exemption application.⁶</p>
Certainty and consistency
<p>The courts have found that the requirements for doors are inconsistent. Councils take different approaches to administering the requirements. Some councils have granted exemptions to allow doors that are not self-closing, while other councils now require all doors to be self-closing.⁷</p>

⁴ For example, see www.swishautomation.com/pool-safety-doors

⁵ For example, see www.swishautomation.com/pool-safety-doors/page14

⁶ This average is of the 16 councils where we have data on the number of exemptions and the exemption fee.

⁷ For example, see www.tauranga.govt.nz/council-a-z/swimming-pool-fencing.aspx

Description of the options – Doors opening directly to the pool area

- 31 This RIS analyses the following options for doors opening to the pool area, relative to the status quo:
- Option 1.1 (**recommended**): require doors opening to pool areas installed in the future to meet the performance standard in the Building Code for restricting access to the pool
 - Option 1.2: prohibit doors from opening directly to the pool area (for pools installed in the future)
 - Option 1.3: apply Option 1.1 to existing pools as well as new pools
 - Option 1.4: apply Option 1.2 to existing pools as well as new pools.
- 32 Options 1.1 and 1.3 involve relying on the Building Code rather than the Act for setting the requirements for restricting access to pools. Under this change, pools would be required to have a means to restrict access by children aged 0-4 years, but the specific requirements would be more flexible than currently, without the current inconsistencies or the cumbersome exemption process under the Act. The proposal would affect an estimated 1400 pools installed each year, but is not expected to generate large savings in total.

Analysis of the options – Doors opening directly to the pool area

Option 1.1 (recommended): Require doors opening to pool areas installed in the future to meet the performance standard in the Building Code for restricting access to the pool

33 An analysis of Option 1.1, relative to the status quo, is set out in the following table.

Risk of drowning
Not expected to significantly affect current risk Option 1.1 would clarify that doors must restrict access to the pool. We do not expect Option 1.1 to adversely affect the risk of drowning because Option 1.1 essentially clarifies a current requirement.
Compliance costs
Not expected to significantly change costs We do not expect Option 1.1 to impose additional compliance costs on pool owners because the existing requirement is for doors to be self-closing or have an alternative means to restrict access.
Administrative costs
Not expected to significantly change costs Option 1.1 would end the need for councils to consider exemptions for doors. Officials have not estimated the size of this cost saving because it is likely to be small.
Certainty and consistency
✓ Clearer requirements Option 1.1 involves relying on the Building Code rather than the Act for setting the requirements for restricting access to pools. This would end the duplication and inconsistencies of the current requirements.

Option 1.2: Prohibit doors from opening directly to the pool area (for pools installed in the future)

34 An analysis of Option 1.2, relative to the status quo, is set out in the following table.

Risk of drowning
<p>Not expected to significantly affect current risk</p> <p>Prohibiting doors opening directly to new pools is likely to be safer than requiring doors to be self-closing (the status quo) because there would be no direct access from the house to the pool area. Any child going out of the house would enter an outdoor area that is separated from the pool.</p> <p>We have estimated the effect of Option 1.2 to be close to zero because:</p> <ul style="list-style-type: none"> the number of new pools with direct door access is relatively small (estimated at 800 per year) although there is evidence comparing the risk of pools with and without door access, we are not aware of evidence comparing the risk of pools with self-closing doors and pools without door access. <p>Some submitters mentioned the risk that people deliberately override the self-closing mechanism or do not keep the mechanism in good repair. We have not quantified this risk. In order for self-closing doors to comply with the Building Code, they must be durable and likely to be used as intended.</p> <p>The separate proposal for five-yearly inspections (paragraph 52) would help to manage any risk of self-closing mechanisms failing, because they would need to pass the five-yearly inspections.</p>
Compliance costs
<p>Not expected to significantly change costs</p> <p>We have not quantified any cost as a result of prohibiting doors from opening directly to the pool area, in the case of new pools. When installing a pool, owners currently need to install some means to restrict access, and both self-closing mechanisms for doors, and fencing and a gate, involve a cost. There may be situations where self-closing doors would be more expensive than fencing.</p> <p>Option 1.2 has been demonstrated to be feasible, as it has been implemented in Australia.</p>
Administrative costs
<p>Not expected to significantly change costs</p> <p>Option 1.2 would save councils the cost of approving door mechanisms for new pools, but councils would still need to assess the other means of restricting access to the pool.</p>
Certainty and consistency
<p>✘ Inconsistent with the performance-based approach of the Building Code</p> <p>Option 1.2 is inconsistent with the performance-based approach of the Building Code, where any solution must be approved if it meets the performance standard for restricting access.</p>

Option 1.3: Require doors opening to pool areas to meet the performance standard in the Building Code for restricting access to the pool – for existing pools as well as pools installed in the future

35 An analysis of Option 1.3, relative to the status quo, is set out in the following table.

Risk of drowning
<p>✓ Estimated to avoid two drownings every 10 years (on average)</p> <p>Option 1.3 would lead to a reduction in the total risk of drowning because it would apply the Building Code standard for restricting access to existing pools that do not have self-closing doors (an estimated 7000 pools). When councils granted exemptions for doors, they may not have had the benefit of research about the risk of doors (Barker et al 2003, Barker et al 2008).</p> <p>We estimate that Option 1.3 could avoid two drownings every 10 years (on average). As part of making this estimate, we have assumed that the risk of drowning relates to doors being left open, and that self-closing doors go a considerable way to managing that risk. This estimate of reduced risk of drowning is sensitive to this assumption, and to our estimate of the number of pools that have doors that are not self-closing.</p>
Compliance costs
<p>✖✖ Estimated cost of \$15 million (NPV)</p> <p>We estimate the compliance costs for pool owners of Option 1.3 to be \$15 million (net present value – NPV). We estimate that 7000 pools could require retrofitted self-closers, or another means to restrict access. The cost might be particularly high for some door configurations, for example where councils granted exemptions under clause 11 of the Schedule because the councils were satisfied it was ‘impossible or unreasonable’ to require the doors to be self-closing. We have assumed an average cost of \$2100 per door, based on an assumption that owners would need to make sliding doors – and more difficult configurations – to be self-closing.</p> <p>This estimate of \$15 million NPV is sensitive to the assumption about how many pools are affected, and the average cost per door.</p>
Administrative costs
<p>✖ Estimated cost of \$4 million (NPV)</p> <p>Option 1.3 would involve councils re-approving the estimated 7000 pools that would need self-closers fitted on doors. We have assumed an average cost of \$500 for reapproving pools (assuming that the approval would be straight-forward in many cases).</p>
Certainty and consistency
<p>✓✓ Clearer requirements. Consistent for all pools</p> <p>Option 1.3 would end the current uncertainty about the requirements for doors. Option 1.3 would impose a uniform requirement on both existing and new pools.</p>

Option 1.4: Prohibit doors from opening directly to the pool area – for existing pools as well as pools installed in the future

36 An analysis of Option 1.4, relative to the status quo, is set out in the following table.

Risk of drowning
<p>✓ Estimated to avoid two drownings every 10 years (on average)</p> <p>Option 1.4 would lead to a reduction in the total risk of drowning because it would apply to existing pools that have direct door access (an estimated 25,000 pools).</p> <p>We have estimated the reduction in risk to be the same as Option 1.3. Self-closing doors go a considerable way to managing the risk of doors being left open. We have not estimated the difference in the risk of drowning of self-closing doors relative to prohibiting doors from opening to the pool area.</p>
Compliance costs
<p>*** Estimated cost of \$80 million (NPV)</p> <p>Under Option 1.4, owners of existing pools with direct door access would need to install a different means of restricting access to the pool, such as a fence. For some existing pools, installing a fence between the house and the pool could be expensive or infeasible. We estimate that 25,000 pools would need a different means of restricting access installed. We have assumed an average cost of \$3300 for installing one side of fencing and a gate, with a total estimated cost of \$80 million. This total is sensitive to the assumptions about the number of pools with doors, and the average cost of installing a fence or other means of restricting access between the house and the pool.</p>
Administrative costs
<p>** Estimated cost of \$24 million (NPV)</p> <p>Option 1.4 would involve councils re-approving the estimated 25,000 pools that would need a means to restrict access other than a door. We have estimated the average cost of re-approving pools at \$1000 per pool (the cost of what some councils charge for a building consent involving a pool), with a total estimated cost of \$24 million. This estimate is sensitive to these assumptions.</p>
Certainty and consistency
<p>* Inconsistent with the performance-based approach of the Building Code</p> <p>Option 1.4 is inconsistent with the performance-based approach of the Building Code, where any solution must be approved if it meets the performance standard for restricting access.</p>

Summary of analysis – Doors opening directly to the pool area

37 The effects of the options are summarised in the following table.

Option	Effect on risk of drowning	Compliance costs (savings) for owners	Administrative costs (saving) for councils	Certainty and consistency
	Drownings every 10 years	\$ million (NPV)	\$ million (NPV)	
Option 1.1 (recommended): Require doors opening to pool areas installed in the future to meet the performance standard in the Building Code for restricting access	Not expected to significantly affect current risk	Not expected to significantly change costs	Not expected to significantly change costs	Clearer requirements ✓
Option 1.2: Prohibit doors from opening directly to the pool area – for pools installed in the future	Not expected to significantly affect current risk	Not expected to significantly change costs	Not expected to significantly change costs	Inconsistent with performance-based approach ✗
Option 1.3: Apply Option 1.1 to existing pools as well as pools installed in the future	Estimated to avoid two drownings every 10 years (on average) ✓	Estimated \$15 million cost ✗✗	Estimated \$4 million cost ✗	Clearer requirements Consistent for all pools ✓✓
Option 1.4: Apply Option 1.2 to existing pools as well as pools installed in the future	Estimated to avoid two drownings every 10 years (on average) ✓	Estimated \$80 million cost ✗✗✗	Estimated \$24 million cost ✗✗	Inconsistent with performance-based approach ✗

38 This table highlights that an investment of an estimated \$20 million (NPV) is estimated to avoid two drownings every 10 years (on average). These figures have wide margins of error, limiting the inferences that can be drawn.

Public consultation – Doors opening directly to the pool area

39 A proposal along the lines of Option 1.1. was supported by 81 per cent of submitters. However, safety groups strongly supported the alternative option of prohibiting doors from opening directly to the pool area.

40 The peak body for safety groups, Water Safety New Zealand, said:

“Domestic and international research shows that children face a significantly greater risk of drowning if doors open from a house to a pool. The alternative option removes that risk and, given the research, any additional cost of compliance for the pool owner is a small and worthwhile price to pay for the increased level of safety.”

41 Some submitters said that people might prop self-closing doors open. WaterSafe Auckland said:

“Evidence from council pool fencing inspectors indicates that where doors have been fitted with locking devices, self-closing devices or alarms these have been immobilised or isolated allowing large unprotected areas or openings to remove the inconvenience of the restricted access and satisfy the day to day use of the home occupier.”

42 These issues are taken into account in the analysis above.

Conclusion and recommendation – Doors opening directly to the pool area

43 MBIE recommends Option 1.1, of relying on the Building Code to set the requirements for restricting access for pools installed in the future. Option 1.1 reduces uncertainty, without adversely affecting the risk of drowning or compliance costs.

Problem 2 – Monitoring and enforcing obligations under the Act

Status quo and problem definition

- 44 The Act requires councils to take ‘all reasonable steps’ to ensure that owners comply with the Act. Pool owners must:
- install a fence; and
 - maintain the fence in a compliant state.
- 45 Councils use both the powers in the Fencing of Swimming Pools Act 1987 and the Building Act 2004 to enforce these obligations. For ensuring:
- a fence is installed, councils have often used powers under the Building Act
 - the fence is maintained, councils have generally relied on the powers in the Fencing of Swimming Pools Act.
- 46 The Act does not provide further guidance about what ‘reasonable steps’ would be prudent for councils to take to ensure owners comply with the Act. Guidance issued by the administering department in 1999 suggests that ‘reasonable steps’ should include (Department of Internal Affairs 1999):
- informing owners about their obligations under the Act
 - locating pools
 - periodically inspecting all pools
 - inspecting pools councils believe are non-compliant.
- 47 Guidance in NZS 8500:2006 suggests the periodic inspections of all pools be three-yearly.
- 48 Almost all drownings in New Zealand (96 per cent) occurred in non-compliant pools. The reasons for non-compliance were that the:
- gate or door to the pool area had been left open (39 per cent of drownings)
 - fence had not been maintained and was no longer child-resistant (39 per cent)
 - pool did not have a fence (18 per cent).
- 49 Potential reasons why some owners do not maintain their means of restricting access to the pool might include that owners:
- are unaware of the danger that pools pose to young children
 - are unaware of their obligations under the Act
 - would be willing to voluntarily comply, but need reminding
 - prefer to let the council inspect their pool and tell them what needs to be done.

50 The problems with the status quo are set out in the following table.

Risk of drowning
<p>Research shows the level of compliance is lower where councils do not proactively monitor compliance (Bugeja and Franklin (2012), Gulliver and Chalmers (2006), Stevenson et al (2003), van Weerdenburg et al (2003)). When councils introduced a policy of periodically inspecting pools, some found a majority to initially be non-compliant. The risk of drowning is higher in non-compliant pools than in compliant pools.</p> <p>The number of councils periodically inspecting pools has been increasing. The percentage of pools periodically inspected has increased from 50 per cent in 2002 to 80 per cent in 2013. There are 12,000 pools (20 per cent of pools) in the areas of 30 councils that do not periodically inspect pools.</p>
Compliance costs
<p>Owners incur a cost to maintain their pool barrier in a compliant state. Means of restricting access that met the performance standard of the Building Code should be durable and only require infrequent maintenance.</p>
Administrative costs
<p>Councils spend an estimated \$3.5 million per year on monitoring pools and enforcing compliance with the Act, or an estimated \$60 per pool (for councils that inspect pools regularly). Councils generally recover the cost of inspections from pool owners.</p>
Certainty and consistency
<p>Councils' monitoring and enforcement obligations are unclear because the Act provides little guidance. Councils take different approaches to monitoring and enforcement: some councils inspect pools three-yearly, others less frequency, and others do not periodically inspect pools. Councils that take few steps to enforce the Act face a risk that courts or coroners find the councils to be in breach of their obligations.</p>

51 States in Australia have been strengthening inspection regimes to increase levels of compliance. Queensland and New South Wales have recently introduced more rigorous inspection regimes (Queensland Department of Housing and Public Works (2012), New South Wales Department of Premier & Cabinet (n.d.)).

Description of the options – Monitoring and enforcing the Act

52 This RIS analyses the following options for monitoring compliance with the Act, relative to the status quo:

- Option 2.1 (**recommended**): require councils to inspect swimming pools at least five-yearly (but not spa pools, portable pools or garden ponds)
- Option 2.2: require councils to inspect swimming pools at least three-yearly (but not spa pools, portable pools or garden ponds)

53 Under both these options, councils would continue to have the power to inspect properties they have reasonable grounds to believe have non-compliant pools.

54 These options include a proposal to create an infringement regime, and remove the current offences in the Act that involve councils taking court proceedings. We expect an infringement regime to provide more timely and efficient options for councils to use when necessary. We expect councils will continue to take an educative approach and encourage voluntary compliance in the first instance. Our analysis below does not include any assessment of the size of the savings in council officer time because we have limited information.

Analysis of the options – Monitoring and enforcing the Act

Option 2.1 (recommended): Require councils to inspect swimming pools at least five-yearly (but not spa pools, portable pools or garden ponds)

55 An analysis of Option 2.1, relative to the status quo, is set out in the following table.

Risk of drowning
<p>✓✓✓ Estimated to avoid six drownings every 10 years (on average)</p> <p>Option 2.1 would reduce the risk of drowning in the 20 per cent of pools that are not currently periodically inspected because it is expected to improve compliance with the Act. By analysing the data on drowning and the data of when each council began to periodically monitor pools, we estimate that Option 2.1 could avoid six drownings every 10 years (on average).</p> <p>We expect that Option 2.1 would help to remind owners and educate them about maintaining their pool. Owner awareness of the risks of drowning is essential to encouraging them to continually restrict access (e.g. by not propping doors open).</p> <p>Option 2.1 could result in councils that are currently inspecting three-yearly, changing to five-yearly inspections. The success of Option 2.1 will depend on owners proactively maintaining their pools between five-yearly inspections. We anticipate that councils would undertake education as well as monitoring and enforcement. For example, some councils annually remind owners to check their pools.</p> <p>The evidence about owners maintaining their pools between inspections is mixed. Australian research, and some data from councils in New Zealand showed high levels of compliance when pools were first inspected during each inspection cycle (Stevenson and Rimajova 2003). However, some councils have found a significant number of pools to have fallen into non-compliance between inspections.</p>
Compliance costs
<p>Not expected to significantly change costs</p> <p>Owners of pools that become subject to periodic inspections are likely to increase their expenditure on maintaining their pool barrier. We have not estimated this cost because the requirements on the owners will not change, and the future cost of maintenance would have been taken into account when the pool was installed.</p>
Administrative costs
<p>✓ Estimated net savings of \$4 million (NPV)</p> <p>Option 2.1 involves \$7 million (NPV) additional administrative costs for councils that currently do not inspect pools periodically (including councils that inspect pools less frequently than five-yearly).</p> <p>For councils that currently inspect pools three-yearly, the proposal could potentially save up to \$11 million (NPV) as a result of moving to five-yearly inspections. There is a risk that these savings would be lower, because Option 2.1 includes the flexibility for councils to inspect more actively than five-yearly where necessary.</p> <p>Any administrative costs and savings are likely to be passed on to pool owners through inspection fees and/or targeted rates.</p>
Certainty and consistency
<p>✓ Clearer requirements. Consistent for all swimming pools</p> <p>Option 2.1 provides more certainty about what steps councils should take to monitor pools, and helps to ensure that the risk of drowning is being adequately managed for all pools.</p>

Option 2.2: Require councils to inspect swimming pools at least three-yearly (but not spa pools, portable pools or garden ponds)

56 An analysis of Option 2.2, relative to the status quo, is set out in the following table.

Risk of drowning
<p>✓✓✓ Estimated to avoid six drownings every 10 years (on average)</p> <p>Three-yearly inspections would be likely to reduce the risk of drowning beyond that achieved by five-yearly inspections. On the basis of the information to hand, we estimate the difference is not significant. Mechanisms to restrict access must be durable to comply with the Building Code, and should not require frequent maintenance. We asked councils whether pools were compliant when first visited, and the responses did not show that three-yearly inspections were achieving higher compliance than five-yearly inspections. On the other hand, some councils indicated that a significant minority of pools become non-compliant between three-yearly inspections. Any difference in risk could be reduced if councils provide education (such as annual reminders) to supplement five-yearly inspections.</p>
Compliance costs
<p>Not expected to significantly change costs</p> <p>For the same reasons as stated in the assessment of Option 2.1.</p>
Administrative costs
<p>** Estimated cost of \$15 million (NPV)</p> <p>Option 2.2 would involve additional administrative costs for all councils other than the 17 councils that currently inspect pools three-yearly.</p>
Certainty and consistency
<p>✓ Clearer requirements. Consistent for all swimming pools</p> <p>For the same reasons as stated in the assessment of Option 2.1.</p>

Summary of the analysis – Monitoring and enforcing the Act

57 The effects of the options are summarised in the following table.

Option	Effect on risk of drowning Drownings avoided every 10 years	Compliance costs (savings) for owners \$ million NPV	Administrative costs (saving) for councils \$ million NPV	Certainty and consistency
<p>Option 2.1 (recommended): Inspect swimming pools five-yearly</p> <p><u>Breakdown by pools:</u></p> <ul style="list-style-type: none"> • Pools currently inspected three-yearly • Pools not periodically inspected at present, or inspected less frequently than five-yearly 	<p>Estimated to avoid six drownings every 10 years (on average)</p> <p>✓✓✓</p> <p>Not expected to significantly affect current risk</p> <p>Estimated to avoid six drownings every 10 years (on average)</p> <p>✓✓✓</p>	<p>Not expected to significantly change costs</p> <p>Not expected to significantly change costs</p> <p>Not expected to significantly change costs</p>	<p>(Estimated \$4 million saving)</p> <p>✓</p> <p>(Estimated \$11 million saving)</p> <p>✓✓</p> <p>Estimated \$7 million cost</p> <p>✗</p>	<p>Clearer requirements</p> <p>Consistent for all swimming pools</p> <p>✓</p>
<p>Option 2.2: Inspect swimming pools three-yearly</p>	<p>(Estimated to avoid six drownings every 10 years (on average))</p> <p>✓✓✓</p>	<p>Not expected to significantly change costs</p>	<p>Estimated \$15 million cost</p> <p>✗✗</p>	<p>Clearer requirements</p> <p>Consistent for all swimming pools</p> <p>✓</p>

58 This table highlights the significant benefit of periodically inspecting pools. For pools that are not currently inspected (or are inspected less frequently than five-yearly), we estimate that an investment of an estimated \$7 million (NPV) would avoid an estimated six drownings every 10 years (on average).

Public consultation – Monitoring and enforcing the Act

- 59 The consultation document included a proposal that is not included in this RIS – of owners doing three-yearly self-checks and submitting them to their council, and the council undertaking random audits. This proposal was supported by 64 per cent of submitters, for reasons including that pool owners should take more responsibility for maintaining their pool. A minority of submitters – 28 per cent – wanted the council to inspect pools three-yearly.
- 60 The proposal mentioned in paragraph 59 is not included in this RIS because council submitters:
- questioned the value of the information they would receive from owners submitting self-checks
 - already encourage owners to check their pools – for example, if owners do maintenance work before councils inspect their pools, they can avoid the need for the councils to visit again for follow-up inspections
 - did not support random audits because they have limited information to determine beforehand which pools are non-compliant, and find a significant minority of pools (20 to 40 per cent) to be non-compliant on first inspection.
- 61 MBIE developed Option 2.1 (five-yearly inspections) as an alternative option for achieving the objectives of the proposal in the consultation document, of:
- expecting pool owners to take responsibility for checking their pools, and
 - seeking to ensure the risk of drowning is well-managed at a minimum reasonable cost.

Conclusion and recommendation – Monitoring and enforcing the Act

- 62 MBIE recommends Option 2.1 (five-yearly inspections). Option 2.1 addresses the problems of:
- uncertainty surrounding the current obligation for councils to take ‘all reasonable steps’ to enforce the Act
 - pools that councils do not periodically inspect posing a higher risk of drowning than pools that are periodically inspected
 - the potential to reduce the cost of the approach currently taken by councils that inspect three-yearly while encouraging pool owner responsibility and maintaining the safety of young children.
- 63 Option 2.1 is estimated to avoid six drownings every 10 years (on average). Councils currently inspecting three-yearly could potentially save \$11 million (NPV) – although there are risks around the size of this saving. Councils that do not currently undertake periodic inspections would face costs estimated at \$7 million (NPV).

Problem 3 – Spa pools

Status quo and problem definition

- 64 The Act currently makes no distinction between spa pools and swimming pools. A spa pool that is subject to the Act requires a fence unless the council grants a special exemption under section 6 of the Act.
- 65 Spa pools are generally fitted with child-resistant covers, and many councils have granted exemptions for spa pools that have child-resistant covers. When granting an exemption, councils have often referred to the New Zealand Standard NZS 8500:2006. The Standard sets out specifications for spa pools to be child-resistant, including having a child-resistant cover and non-climbable walls that are 760mm high.
- 66 Spa pools with child-resistant covers do not comply with the Act unless owners install an additional means of restricting access because:
- the Act requires a fence
 - the Building Code requires any barrier to restrict access, and a spa pool cover does not restrict access if they are left off (Determination 2002/10).
- 67 Regulations in various overseas jurisdictions exempt spa pools from fencing requirements if they have a child-resistant cover. This exemption is reflected in international pool safety standards (ISPSC 2012). In Australia, New South Wales exempts spa pools that have a child-resistant cover, but spa pools are not exempt in other Australian states.
- 68 The number of spa pools in New Zealand is not known with any certainty, but industry representatives estimate there could be 100,000. We estimate that councils know the location of 20,000, and that 4,000 of these are in council areas that require all spa pools to be fenced (at an estimated cost of \$15 million). Councils covering 80 per cent of known spa pools have granted exemptions on a case-by-case basis.

69 The problems with the status quo are set out in the following table.

Risk of drowning
Spa pools accounted for 11 per cent of drownings in the past twenty years. During this period, child-resistant covers became the industry norm, and there have been no recorded drownings in child-resistant spa pools (although the condition of the cover was not recorded for all drowning incidents). There have been almost no drownings in spa pools in the last 10 years. These statistics must be interpreted cautiously because of the low number of drownings in spa pools. Based on these statistics and the estimated number of spa pools, we estimate that the risk of drowning in spa pools appears to be in the order of one per cent of the risk of drowning in unfenced swimming pools. We make this estimate on the basis of almost no drownings in the last 10 years in the estimated 100,000 spa pools, compared to 10 drownings per year in an estimated 50,000 swimming pools prior to 1987 (Local Bills Committee 1983).
Compliance costs
The cost of fencing the estimated 4000 spa pools that are known to councils and required to be fenced is estimated to be \$15 million. Owners of spa pools that are not known to councils (estimated at 80 per cent of spa pools) would face the cost of fencing them (or seeking an exemption) if they became known to councils.
Administrative costs
Councils currently incur an estimated \$4 million (NPV) periodically inspecting known spa pools. Some councils spend resources searching for pools that are subject to the Act, including spa pools.
Certainty and consistency
Councils take different approaches to administering the Act in respect of spa pools. Some councils commonly exempt spa pools from requiring a fence (on a case by case basis). Other councils grant no exemptions and require a fence. Most owners have not notified their council that they have a spa pool, and we understand that these spa pools are unlikely to be fenced. This widespread lack of compliance with the Act creates the potential that councils and pool owners could be found by the courts or coroner not to have complied with their obligations.

Description of the options – Spa pools

70 This RIS analyses the following options for spa pools:

- Option 3.1 (**recommended**):
 - provide that child-resistant spa pools adequately restrict access
 - do not require councils to locate and periodically inspect spa pools
 - continue to allow councils to inspect properties they believe contain non-compliant spa pools.
- Option 3.2: same as Option 3.1, except require councils to locate and periodically inspect spa pools.
- Option 3.3: treat spa pools the same as swimming pools (owners would need to install a means to restrict access other than a child-resistant cover, and councils would periodically inspect spa pools).

71 All of these options include proposals to:

- require manufacturers or retailers to inform buyers of their obligations under the Act
- removing the power for councils to exempt spa pools from the requirements of the Act.

Analysis of the options – Spa pools

Option 3.1 (recommended):

- **Provide that child-resistant spa pools adequately restrict access**
- **Do not require councils to locate and periodically inspect spa pools**
- **Continue to allow councils to inspect properties they believe contain non-compliant spa pools**

72 An analysis of Option 3.1, relative to the status quo, is set out in the following table.

Risk of drowning
<p>Not expected to significantly affect current risk</p> <p>Having a means to restrict access (e.g. a fence) is likely to reduce the risk of drowning beyond that achieved by having a child-resistant cover alone. We have assessed this reduction in risk as close to zero.</p> <p>Child resistant covers have become the industry norm, and 10-year drowning statistics suggest that the risk of drowning in spa pools appears to be much lower than in swimming pools. Industry representatives advise that owners keep their spa pools covered in order to retain heat. Some safety groups and other professionals working in pool safety said in their submissions that some owners do not keep their covers on or latched.</p> <p>Another reason any reduction in risk would be small (relative to the status quo) is because currently only an estimated four per cent of spa pools are fenced, so any change would have little total effect.</p>
Compliance costs
<p>✓ Estimated savings of \$1 million (NPV)</p> <p>Every year, an estimated 150 new spa pools are required to be fenced. Option 3.1 saves this cost, estimated at \$1 million (NPV). These 150 spa pools are the fraction of the estimated 4500 new spa pools sold each year that are known to councils and are in council areas that do not grant exemptions.</p>
Administrative costs
<p>✓✓ Estimated savings of \$11 million (NPV)</p> <p>Option 3.1 would save councils the cost of periodically inspecting spa pools. The estimated cost of inspecting the estimated 20,000 known spa pools (in areas where councils currently undertake periodic inspections) is estimated at \$11 million (NPV). These savings would benefit pool owners who currently pay inspection fees.</p>
Certainty and consistency
<p>✓ Consistent for all spa pools</p> <p>Option 3.1 ensures a consistent national approach to managing the risk of drowning in spa pools, by ending the situation where some councils exempt spa pools while others require fencing.</p> <p>Option 3.1 would require retailers to inform buyers about the Act, so there would be less chance that owners are unwittingly in breach of the Act. There is a risk that some people will buy spa pools that do not have child-resistant covers. Such owners would continue to be required to install a means to restrict access, but enforcing that requirement would pose the same problems as are highlighted in paragraph 69.</p>

Option 3.2:

- **Provide that child-resistant spa pools adequately restrict access**
- **Require councils to locate and periodically inspect spa pools**
- **Continue to allow councils to inspect properties they believe contain non-compliant spa pools**

73 An analysis of Option 3.2, relative to the status quo, is set out in the following table.

Risk of drowning
Not expected to significantly affect current risk Inspecting spa pools periodically is likely to be safer than not inspecting them periodically. Inspections would help to ensure that spa pools remain child-resistant (some pool safety professionals indicated that latches sometimes break). We assess the risk of drowning in spa pools to be close to zero (with or without monitoring) for the same reason as mentioned for Option 3.1 above.
Compliance costs
✓ Estimated savings of \$1 million (NPV) Same effect as for Option 3.1 (above).
Administrative costs
** Estimated cost of \$55 million (NPV) Option 3.2 would require councils to locate and periodically monitor all spa pools. We estimate the cost of locating and inspecting all spa pools (estimated at 100,000) to be \$55 million (NPV). If Option 3.2 was favoured, it would be useful to consider different options for tracking the location of spa pools. This RIS does not consider such options.
Certainty and consistency
✓ Consistent requirements for all spa pools. Could be difficult to implement fully Option 3.2 ensures a consistent national approach to managing the risk of drowning in spa pools. There is a risk that only a relatively small percentage of spa pools will be known to councils and periodically inspected. Option 3.1 raises owner awareness of their obligations under the Act so there would be less chance that they are unwittingly in breach of the Act.

Option 3.3: Treat spa pools the same as swimming pools (owners would need to install a means to restrict access other than a child-resistant cover, and councils would periodically inspect spa pools)

74 An analysis of Option 3.3, relative to the status quo, is set out in the following table.

Risk of drowning
<p>Not expected to significantly affect current risk</p> <p>Installing a means of restricting access (in addition to a child-resistant cover) is likely to be safer than a child-resistant cover alone, because the means to restrict access would always be in place. For example, the only time that a compliant fence does not restrict access is during the few seconds it takes to pass through the gate.</p> <p>We assess the reduction in risk of drowning to be close to zero. Although the risk of drowning in a child-resistant spa pool appears to be much lower than a swimming pool, the low number of drownings makes it difficult to estimate the size of the risk with any certainty.</p>
Compliance costs
<p>*** Estimated cost of \$300 million (NPV)</p> <p>Assuming that councils are able to locate spa pools, owners would incur the cost of installing a means of restricting access to them. Installing a means to restrict access to all spa pools (including new spa pools sold each year) is estimated to be \$300 million (NPV). There is considerable uncertainty around this figure because it is sensitive to assumptions about the total number of spa pools and the percentage of spa pools that councils locate.</p>
Administrative costs
<p>** Estimated cost of \$55 million (NPV)</p> <p>Councils would incur a cost of locating and monitoring spa pools, as discussed for Option 3.2 (above).</p>
Certainty and consistency
<p>✓ Consistent requirements for all pools. Could be difficult to implement fully</p> <p>There would be nationally-consistent requirements for spa pools – they would all require a means to restrict access other than a child-resistant cover. There is a risk that only a relatively small percentage of spa pools will be known to councils. This risk would be mitigated somewhat by the requirement to inform buyers of their obligations.</p>

Summary of the analysis – Spa pools

75 The effects of the options are summarised in the following table.

Option	Effect on risk of drowning	Compliance costs (savings) for owners	Administrative costs (saving) for councils	Certainty and consistency
	Drownings every 10 years	\$ million NPV	\$ million NPV	
Option 3.1 (recommended): Provide that child-resistant spa pools adequately restrict access. Do not require councils to locate and periodically inspect spa pools.	Not expected to significantly affect current risk	(Estimated \$1 million saving) ✓	(Estimated \$11 million saving) ✓✓	Consistent requirements ✓
Option 3.2: As above, except require councils to locate and periodically inspect spa pools.	Not expected to significantly affect current risk	(Estimated \$1 million saving) ✓	Estimated \$55 million cost xx	Consistent requirements Could be difficult to implement fully ✓
Option 3.3: Treat spa pools the same as other pools	Not expected to significantly affect current risk	Estimated \$300 million cost xxx	Estimated \$55 million cost xx	Consistent requirements Could be difficult to implement fully ✓

76 This table indicates that investment in interventions to reduce drowning in child-resistant spa pools is not estimated to result in a significant reduction in drowning. This result is sensitive to the estimate of the number of drownings in spa pools (which is uncertain due to the small numbers involved), and the estimate of the number of spa pools in New Zealand (which is not known, although the pool industry has provided estimates based on its knowledge).

Public consultation – Spa pools

77 Overall, 88 per cent of submitters in the public consultation supported a proposal along the lines of providing that child-resistant spa pools adequately restrict access, and 49 per cent supported exempting spa pools from periodic inspections.

78 Water Safety New Zealand (the peak body for water safety groups) supported child-resistant spa pools being considered as adequately restricting access, but wanted them inspected by councils. It said:

“That a spa pool is equipped with a lockable cover does not guarantee that the cover will be in place and locked whenever the pool is not in use. Every possible opportunity should be taken to engage with (prospective) pool owners to advise and remind them of their responsibilities, the reasons for being assigned those responsibilities and the potential consequences of failing to meet those responsibilities.”

79 Other safety groups – including the Office of the Children's Commissioner, Safekids New Zealand, the Royal New Zealand Plunket Society, the Paediatrics Society, and Starship Trauma Service – wanted spa pools to be treated the same as other pools.

Conclusion and recommendation – Spa pools

80 MBIE recommends Option 3.1. Option 3.1 reduces compliance costs for spa pool owners, and clarifies owner and council obligations, without significantly affecting the risk of drowning

Problem 4 – Portable pools

Status quo and problem definition

- 81 The Act makes no distinction between portable pools and other swimming pools. The Act does not apply to portable pools containing less than 400mm water, and portable pools with sides higher than 1.2m that a young child cannot climb. The discussion in this section of the RIS is focused on portable pools between 400mm and 1.2m high.
- 82 Councils have powers in the Building Act 2004 to enforce the obligation to install a fence. However, we are not aware of any council using these powers to compel an owner of a portable pool to install a fence around it. For many people, it would not make sense to install a permanent means of restricting access to a portable pool – the pools are inexpensive (an inflatable pool can be bought for \$100) and are temporary, while fencing the pool to the standard required by the Building Code could cost an estimated \$3000 and is likely to be a permanent structure. Aside from fencing, other options for people wishing to comply with the Act include keeping the water level below 300mm or using a pool with sides higher than 1.2m that young children cannot climb.
- 83 Overseas regulations and standards that officials have reviewed require portable pools to be fenced if they are over a certain depth and do not have high rigid walls. In 2013, Australia introduced a requirement for warning labels on portable pools and their packaging.
- 84 There is limited data on the number of portable pools – we estimate there are possibly over 200,000 portable pools in New Zealand, of which 60,000 are subject to the Act. This data is based on assumptions about how many seasons a portable pool is kept for (on average), and what proportion of portable pools are between 400mm and 1.2m.
- 85 An estimated 1000 portable pools are known to councils.

86 The problems with the status quo are set out in the following table.

Risk of drowning
<p>Four young children have drowned in temporary paddling pools in the last 20 years in New Zealand. “Temporary paddling pools” include pools shallower than 400mm as well as pools that are subject to the Act, but not large portable pools because they were coded as swimming pools. There have been no drownings in paddling pools in the last ten years. These data should be treated with caution because of the small numbers involved. Based on these statistics we estimate the risk of drowning in portable pools is less than one per cent of the risk of drowning in swimming pools.</p> <p>Evidence on the risk of drowning in portable pools is mixed, however. Some overseas jurisdictions experience high numbers of drownings in portable pools. In New South Wales, a quarter of backyard child drownings were in portable pools (NSW CDRT 2012). In the United States, portable pools accounted for 11 per cent of home pool drowning of young children, and the drownings occurred across all sizes of pool portable pool (Shields et al 2011).</p> <p>Research found that children drowned after portable pools were left filled with water (Shields et al 2011). Best practice advice includes emptying portable pools and storing them away immediately after each use. It would be generally practical to empty portable pools shallower than 300mm after each use, but anecdotal evidence suggests that pools deeper than 300mm are often left filled, with people using chlorine tablets (for example) to help keep the water clean. Many large portable pools are sold with filters to enable the pool to be left filled with water for days or weeks.</p>
Compliance costs
<p>We assess compliance costs to be close to zero because we are unaware of people installing permanent means of restricting access to portable pools.</p>
Administrative costs
<p>We assess administrative costs to be close to zero because we are unaware of councils proactively requiring owners of portable pools to install a means to restrict access. It is difficult for councils to locate portable pools. Once a portable pool is found, it is usually impractical for councils to take enforcement action aimed at compelling the owner to install a means of restricting access to the pool.</p>
Certainty and consistency
<p>Many owners are unwittingly breaching the Act by not restricting access to their portable pool. (The widespread lack of compliance with the Act creates the potential that councils and pool owners could be found by the courts or coroner not to have complied with their obligations.</p>

Description of the options – Portable pools

87 This RIS analyses the following options:

- Option 4.1 (**recommended**):
 - inform buyers of their obligations under the Act
 - apply the Act to portable pools deeper than 300mm
 - do not require councils to locate portable pools and periodically inspect them.
- Option 4.2: Restrict the sale of portable pools to those with sides lower than 300mm, and those with non-climbable sides higher than 1.2m.

88 Under both options, councils would continue to have the power to inspect properties they believe contain non-compliant portable pools.

Analysis of the options – Portable pools

Option 4.1 (recommended):

- **Inform buyers of their obligations under the Act**
- **Apply the Act to portable pools deeper than 300mm**
- **Do not require councils to locate portable pools and periodically inspect them**

89 An analysis of Option 4.1, relative to the status quo, is set out in the following table.

Risk of drowning
<p>Not expected to significantly affect current risk</p> <p>Option 4.1 has three elements, and we analyse each in turn.</p> <p>Buyer information</p> <p>We have not estimated any change to the risk of drowning as a result of Option 4.1. Option 4.1 would increase buyers' awareness of their obligation to restrict access to portable pools. Some manufacturers and retailers already inform buyers of their obligations under the Act.</p> <p>Any change in behaviour will depend on the voluntary compliance of buyers, because councils would not be required to proactively locate and periodically inspect portable pools.</p> <p>Given the number of portable pools – more than all other pool types combined – any change in behaviour could have a significant total effect on drownings (in particular if the risk of drowning in a portable pool is more than what we estimated).</p> <p>We assess that providing buyer information will reduce the risk of drowning, but not significantly. We base this assessment on the fact that some manufacturers already inform buyers. This assessment is uncertain, because another scenario is that consumers switch to buying pools that are safer for young children.</p> <p>Applying the Act to portable pools containing water deeper than 300mm</p> <p>Many pools with less than 300mm are practicable to empty after each use. We understand that portable pools deeper than 300mm – in their normal use – are often left filled with water rather than being emptied immediately after each use. Products such as chlorine tablets support this practice. This part of Option 4.1 would help to ensure that those portable pools likely to be left filled with water are covered by the Act.</p> <p>This part of Option 4.1 is supported by safety groups because it aligns with Australian regulations. It would reinforce water safety messages because the Act would be better targeted at portable pools that are not practicable to use in accordance with best practice.</p> <p>Overall, we expect that changing the minimum depth of pool from 400mm to 300mm would reduce the risk of drowning, but not significantly, because the proportion of portable pools between 300mm and 400mm is a fraction of total portable pools, and the change essentially seeks to encourage people to voluntarily adopt best practice – even if councils could locate portable pools, councils would be unlikely to spend significant resources taking enforcement action for pools of this depth unless there was new evidence that the risk of drowning is much higher than we have estimated.</p> <p>Councils not required to locate and periodically inspect portable pools</p> <p>We do not expect this part of Option 4.1 to involve much change to the risk of drowning:</p> <ul style="list-style-type: none">• we are not aware of councils currently searching specifically for portable pools or periodically monitoring them (although some councils locate portable pools as part of their general searching for pools of all types).• councils would retain their existing power to inspect properties they believe contain non-compliant pools. Where councils find non-compliant portable pools, we expect that councils would continue to take an educative approach, reserving the enforcement tools to address persistent offending. The proposal to not require councils to search for portable pools is a permissive proposal, and if data in the future revealed that the risk of drowning was much higher than we have estimated, there would continue to be scope for councils to respond. <p>Overall, we assess this part of Option 4.1 as having a neutral effect on the risk of drowning, taking into account in particular our understanding that councils do not currently actively search for and inspect portable pool.</p> <p>Overall assessment</p> <p>Our overall assessment is that the proposal is likely to reduce the risk of drowning in portable pools, but that reduction is not likely to be significant because it depends on voluntary compliance. Furthermore, given that drownings are low – on average one drowning in 10 years – any reduction in risk would accordingly be low.</p>

Compliance costs

Not expected to significantly change costs

We have not estimated any change to compliance costs for owners of portable pools because we do not expect owners will install a means of restricting access to a small portable pool as a result of being made aware of their obligations under the Act. Some people might choose to limit their purchases to pools that are shallower than 300mm or have sides higher than 1.2m that young children cannot climb. People who purchase pools with sides between 300mm and 400mm high would continue to be exempt under the Act if they kept the water level below 300mm. We understand that portable pools below 300mm are readily available – portable pools below this height are exempt from fencing regulations in Australia.

Industry representatives suggested ensuring consistency with Australian regulations to simplify manufacture of products for the Australasian market.

Administrative costs

Not expected to significantly change costs

We have not estimated any change to administrative costs because we assess administrative costs to be close to zero. The proposals in Option 4.1 would tend to reduce costs (by not requiring councils to search for and periodically inspect portable pools).

MBIE would need to monitor the requirement for manufacturers or retailers to give information to buyers, but we assess the cost of this monitoring as close to zero (when compared with the other costs assessed in this RIS).

Certainty and consistency

✓ Clearer requirements

Option 4.1 would clarify that councils are not required to search for and periodically inspect portable pools. This would help to clarify what steps councils should take to enforce the obligations of the Act.

Option 4.2: Restrict the sale of portable pools to those with sides lower than 300mm, and those with non-climbable sides higher than 1.2m

90 Option 4.2 was not considered in depth because the Act provides a mechanism to control the use of portable pools. For products that ‘will or may cause injury’, Part 3 of the Fair Trading Act 1986 provides the Minister of Consumer Affairs with powers to: ban a product (interim and then permanent) through an unsafe goods notice, make a standards mandatory through regulation, or order a compulsory recall.

91 An analysis of Option 4.2 relative to the status quo is set out in the following table.

Risk of drowning
<p>✓ Estimated to avoid one drowning every 10 years (on average)</p> <p>Option 4.2, if successfully enforced, is estimated to avoid the risk of one drowning every 10 years because the portable pools between 300mm and 1.2m would not be available for sale. This figure contains significant uncertainty because it depends on:</p> <ul style="list-style-type: none"> • estimates of the risk of drowning in portable pools (which is difficult to estimate because there have been so few drownings in portable pools) • what proportion of the total portable pools sold is between 300mm and 1.2m <p>In addition, without significant expenditure by the affected agencies, expectations about effectively controlling the sale of these portable pools should be tempered.</p>
Compliance costs
<p>We have not assessed the effect on compliance costs</p> <p>If Option 4.2 was successfully enforced, the only portable pools that would be available would be less than 300mm or higher than 1.2m (with non-climbable sides). This limits consumer choice and could affect an estimated 20,000 pools currently sold per year (20 per cent of total portable pool sales). Our understanding is that portable pools below 300mm are readily available. However, we have not quantified the economic cost of the reduction in consumer choice because we have not considered Option 4.2 in detail.</p>
Administrative costs
<p>✗ Expected to have a cost. We have not estimated the size of the cost</p> <p>There would be costs involved in administering the control of the sale of portable pools. The enforcement would fall to the Commerce Commission and NZ Customs, and would require significant expenditure. We have not quantified this cost because we have not considered Option 4.2 in detail.</p>
Certainty and consistency
<p>✗ Not consistent</p> <p>There are risks around the degree to which the Option 4.2 could be successfully enforced.</p> <p>Option 4.2 is not consistent with the current or proposed approach to other pool types. For example, spa covers are not controlled, and we are proposing to rely on the Act to encourage people to buy only child-resistant covers for spa pools used at home.</p>

Summary of the analysis – Portable pools

92 The effects of the options are summarised in the following table. Throughout this RIS, when we say ‘Not expected to significantly affect current risk.’ and ‘no change to cost’, we include instances where the quantified change is close to zero.

Option	Effect on risk of drowning Drownings every 10 years	Compliance costs (savings) for owners \$ million NPV	Administrative costs (saving) for councils \$ million NPV	Certainty and consistency
Option 4.1 (recommended): Information to buyers about their obligations. Councils not required to search for and periodically monitor portable pools.	Not expected to significantly affect current risk	Not expected to significantly change costs	Not expected to significantly change costs	Clearer requirements ✓
Option 4.2: Restrict the sale of portable pools to those with sides < 300mm, and those with non-climbable sides > 1.2m [Not assessed in detail]	Estimated to avoid one drowning every 10 years (on average)	Not assessed	Cost (size not assessed) ✘	Not consistent ✘

Public consultation – Portable pools

93 In the public consultation, 88 per cent of submitters supported the proposal along the lines of Option 4.1.

Conclusion and recommendation – Portable pools

94 MBIE recommends Option 4.1. Option 4.1 raises awareness about the risk of drowning, and addresses the uncertainty about the expected level of monitoring and enforcement of the requirements. We estimate the risk of drowning in portable pools to be much lower than in permanent swimming pools.

Problem 5 – Garden ponds and other water hazards

Status quo and problem definition

- 95 The Act was intended to apply to swimming pools and spa pools, but has, on occasion, been applied to garden ponds and other water hazards because they have been assessed as being:
- manmade
 - deeper than 400mm
 - capable of being used for swimming, wading, paddling or bathing
 - associated with a home.
- 96 Examples of where the Act has been interpreted to apply to garden ponds and other water hazards includes:
- A 2004 coroner's report found that a garden pond where a child had drowned was subject to the Act
 - Departmental guidance on the Act was amended following the coroner's report, and states that, "Ornamental ponds, deeper than 400mm, and not intended for swimming, paddling, wading or bathing are not exempted if they are used in association with a house or other specified building." (Department of Internal Affairs 2005)
 - In 2011, Kapiti Coast District Council obtained a legal opinion stating that, "in our view a stormwater detention pond and other similar water bodies are covered by the definition of 'pool' in the Act." (Kapiti Coast District Council 2011)
- 97 For garden ponds subject to the Act, owners must install a fence, or seek an exemption (for example to install a child-resistant grill or other alternative to a fence).
- 98 Data from councils indicates that eight councils apply the Act to 650 ponds and other water hazards, of which only two councils have applied the Act to any significant number: Auckland Council has applied it to 453 garden ponds deeper than 400mm, and Kapiti Coast District Council has applied it to 122 properties with stormwater detention lakes.
- 99 There is little data from which to estimate the number of garden ponds in New Zealand. We estimate that there could be 10,000 to 30,000 garden ponds in New Zealand, and estimate that 1,500 to 4,000 of these are subject to the Act (most garden ponds being exempt because they are shallower than 400mm). Aside from the data from councils mentioned above, we have taken into account targeted surveys of ponds related to managing noxious weeds (Bay of Plenty Regional Council 2012, Champion and de Winton 2005).
- 100 We are not aware of any overseas jurisdiction that requires fencing or child-resistant grills for garden ponds. In the United Kingdom, garden ponds were the leading location of drownings outside at home (Pearson and Davies 2000). In other jurisdictions the leading site appears to be swimming pools.

101 The problems with the status quo are set out in the following table.

Risk of drowning
Garden ponds accounted for 13 per cent of drownings over the last 20 years. We estimate that the risk of drowning in garden ponds is between 10 per cent and 20 per cent of the risk of drowning in swimming pools, although the size of the difference is uncertain because the number of garden ponds is uncertain.
Compliance costs
Assuming that all 650 identified water hazards are required to have a means of restricting access, the estimated cost of restricting access is \$2 million. We understand that owners of most water hazards at home have not installed a means to restrict access, so most owners of water hazards have incurred no compliance costs.
Administrative costs
There is a cost to periodically inspecting the 650 identified water hazards, but the cost is small relative to the other costs identified in this RIS.
Certainty and consistency
Councils take different approaches to applying the Act to other water hazards: eight councils have identified other water hazards that the Act applies to, but most councils have not applied the Act to other water hazards. The different approaches taken by councils create the potential that councils and pond owners could be found by the courts or coroner not to have complied with their obligations under the Act.

Description of the options – Garden ponds and other water hazards

102 This RIS analyses the following options relative to the status quo:

- Option 5.1 (**recommended**): do not require owners to restrict access to garden ponds or other water hazards
- Option 5.2:
 - require councils to inspect garden ponds five-yearly
 - do not require owners to restrict access to other water hazards
- Option 5.3:
 - apply the Act to garden ponds deeper than 300mm
 - require councils to inspect garden ponds five-yearly
 - do not require owners to restrict access to other water hazards.

Analysis of the options – Garden ponds and other water hazards

Option 5.1 (recommended): Do not require owners to restrict access to garden ponds or other water hazards

103 An analysis of Option 5.1, relative to the status quo, is set out in the following table.

Risk of drowning
<p>Not expected to significantly affect current risk</p> <p>The Act would no longer apply to garden ponds deeper than 400mm (estimated at 1500 to 4000 ponds). The total change in risk is assessed as close to zero because there are few ponds and hazards affected (councils have identified 650 garden ponds and other water hazards).</p>
Compliance costs
<p>Not expected to significantly change costs</p> <p>We estimate no change to total cost because few owners have been required by councils to install a means to restrict access to garden ponds and other water hazards. In addition, we did not estimate any cost savings because people should still restrict access where practicable, to prevent drowning in garden ponds (even if it were not required by the Act).</p> <p>For owners of large water hazards, such as stormwater detention ponds, Option 5.1 would avoid potentially significant costs of restricting access to the hazard.</p>
Administrative costs
<p>Not expected to significantly change costs</p> <p>We estimate no change in total cost because councils have identified few water hazards that are subject to the Act.</p>
Certainty and consistency
<p>✓ Clearer requirements</p> <p>Option 5.1 would limit the Act to swimming pools, where the Act is operating more successfully than for garden ponds and other water hazards. Our understanding from reviewing Hansard is that the Act was intended to cover swimming pools.</p>

Option 5.2:

- **Require councils to inspect garden ponds five-yearly**
- **Do not require owners to restrict access to other water hazards**

104 An analysis of Option 5.2, relative to the status quo, is set out in the following table.

Risk of drowning
No significant change in current risk Any change in total risk of drowning would be small because we estimate there are only 1500 to 4000 garden ponds deeper than 400mm.
Compliance costs
* Estimated cost of \$3 million (NPV) Owners of garden ponds would need to install a fence or child-resistant grill (or other means of restricting access). Although owners are already required to fence garden ponds, we have shown an increase in cost because the requirement is currently only applied to a fraction of ponds that are subject to the Act. The estimate of cost is sensitive to assumptions about the number of garden ponds (which is uncertain) and the average cost of restricting access. For some ponds and water features, retrofitting a means of restricting access could be difficult. Owners would no longer need to install a means of restricting access to stormwater detention ponds, which could be expensive to fence (or to install some other means of restricting access).
Administrative costs
* Estimated cost of \$3 million (NPV) Councils would need to periodically inspect garden ponds deeper than 400mm, estimated to cost \$3 million (NPV). This estimate is sensitive to the assumption about the number of ponds. Auckland Council's experience suggests that it is practicable to enforce a requirement to restrict access to garden ponds deeper than 400mm outside at home.
Certainty and consistency
✓ Clearer requirements Option 5.2 would provide clarity about council and owner obligations relating to garden ponds and other water hazards. We expect that improved clarity will lead councils to actively enforce the Act in relation to garden ponds. There is a risk that councils will locate only a percentage of garden ponds deeper than 400mm.

Option 5.3:

- **Apply the Act to garden ponds deeper than 300mm**
- **Require councils to inspect garden ponds five-yearly**
- **Do not require owners to restrict access to other water hazards**

105 An analysis of Option 5.3, relative to the status quo, is set out in the following table.

Risk of drowning
✓✓✓ Estimated to avoid this is estimated to avoid four drownings every 10 years (on average) If access was restricted to garden ponds deeper than 300mm, this is estimated to avoid four drownings every 10 years (on average). This estimated reduction in drowning assumes that councils locate most garden ponds.
Compliance costs
** Estimated cost of \$15 million (NPV) We estimate the cost of a fence or child-resistant grill for all garden ponds could be \$15 million. This cost is uncertain because it is based on our assumptions about the number of garden ponds and the average cost of restricting access to them. For some ponds and water features, retrofitting a means of restricting access could be difficult. Under Option 5.3 (as with Options 5.1 and 5.2), owners would no longer need to install a means of restricting access to stormwater detention ponds.
Administrative costs
** Estimated cost of \$24 million (NPV) Councils would need to periodically inspect garden ponds, estimated to cost \$24 million (NPV). This estimate is sensitive to the assumption about the number of ponds.
Certainty and consistency
✓✓ Clearer requirements. Consistent for all garden ponds Option 5.3 would provide consistency for all garden ponds (we understand many garden ponds are between 300mm and 400mm and pose the same risk of drowning as deeper ponds). There is a risk that councils will locate only a percentage of garden ponds.

Summary of the analysis – garden ponds and other water hazards

106 The effects of the options are summarised in the following table.

Option	Effect on risk of drowning	Compliance costs (savings) for owners	Administrative costs (saving) for councils	Certainty and consistency
	Drownings every 10 years	\$ million NPV	\$ million NPV	
Option 5.1 (recommended): Do not require owners to restrict access to garden ponds or other water hazards	Not expected to significantly affect current risk	Not expected to significantly change costs	Not expected to significantly change costs	Clearer requirements ✓
Option 5.2: Require councils to inspect garden ponds five-yearly. Do not require owners to restrict access to other water hazards	Not expected to significantly affect current risk	Estimated \$3 million cost ✗	Estimated \$3 million cost ✗	Clearer requirements ✓
Option 5.3: Apply the Act to garden ponds >300mm. Require councils to inspect them five-yearly. Do not require owners to restrict access to other water hazards	Estimated to avoid four drownings every 10 years (on average) ✓✓	Estimated \$15 million cost ✗✗	Estimated \$24 million cost ✗✗	Clearer requirements Consistent for all garden ponds ✓✓

107 This table highlights that an investment of an estimated \$40 million (NPV) could avoid an estimated four drownings every 10 years (on average). The figures in this table are uncertain because they depend on assumptions about the number of garden ponds, and about the average cost of installing a child-resistant grill or fence to restrict access to garden ponds.

Public consultation – garden ponds and other water hazards

108 The consultation document contained Option 5.1, which was supported by 85 per cent of submitters. There was strong support for limiting the regime to swimming pools.

109 Submitters were not consulted on Options 5.2 or 5.3, because we developed them only after analysing the submissions received in the consultation. It is not clear from the submissions what support there would be for these options, although some safety groups – Plunket, Paediatrics Society and Starship Trauma Service – suggested restricting access based on the risk of the hazard to children.

Conclusion and recommendation – garden ponds and other water hazards

110 Option 5.1 helps to focus the Act on managing the risk of drowning in swimming pools. We estimate that swimming pools pose a greater risk of drowning than garden ponds. Option 5.1 would not adversely affect the current risk of drowning in garden ponds.

111 Option 5.3 would significantly reduce the risk of drowning in garden ponds (by an estimated four drownings every 10 years), with an estimated \$40 million (NPV) increase in compliance and administrative costs.

112 The preferred option requires striking an appropriate balance between the risk of young children drowning, and the costs for pond owners and councils. In the circumstances, MBIE recommends Option 5.1.

Consultation

113 The review has been informed by:

- seventy submissions received on a discussion document in 2008 that sought feedback on the issues with the Act (Department of Building and Housing 2008), and 392 submissions on a consultation document in 2013 that sought feedback on proposals to address the issues, including submissions from 11 safety groups, 52 pool industry representatives, 35 councils, 19 council officers, and 29 other professionals connected with pool safety, as well as submissions from private individuals (MBIE 2013a)
- data from 62 councils (covering 96 per cent of the population of New Zealand) relating to the Act including data about pool types, consents, exemptions, periodic inspections, expenditure and fees
- data from Water Safety New Zealand's *DrownBase* containing details about drownings of young children aged 0-4 outside at home between 1993 and 2012
- literature on drowning and fencing of swimming pools
- liaison with selected water safety, council and industry contacts as relevant.

114 The following agencies have been consulted: Ministry of Health, Accident Compensation Corporation, Ministry of Justice, Department of Internal Affairs, The Treasury, Ministry of Education and Ministry of Social Development.

115 A consultation document, [Making Pool Safety Easier](#), was released by MBIE on 21 March 2013, with a closing date for submissions of 10 May 2013 (MBIE 2013a). Most of the proposals in the consultation document were strongly supported by submitters. MBIE has released a summary of the submissions ([MBIE 2013b](#)). These documents are available at www.dbh.govt.nz/consultingon-pools

Conclusions and recommendations

116 The following table summarises the quantified effects of the options in this RIS.

	Change in drownings every 10 years*	Change in owner costs*	Change in council costs*	Change in total costs*
		\$m NPV	\$m NPV	\$m NPV
1. Doors opening to the pool area				
Option 1.1 (recommended): Doors opening to pool areas to meet the standard for restricting access – for new pools	0	0	0	0
Option 1.2: Prohibit doors from opening directly to the pool area – for new pools	(0)	0	0	0
Option 1.3: Apply Option 1.1 to existing pools	(2)	15	4	19
Option 1.4: Apply Option 1.2 to existing pools	(2)	81	24	105
2. Monitoring and enforcement				
Option 2.1 (recommended): Inspect swimming pools five-yearly	(6)	0	(4)	(4)
Option 2.2: Inspect swimming pools three-yearly	(6)	0	15	15
3. Spa pools				
Option 3.1 (recommended): Provide that child-resistant spa pools adequately restrict access. Do not require councils to periodically inspect child-resistant spa pools	0	(1)	(11)	(13)
Option 3.2: Child-resistant spa pools adequately restrict access. Require councils to periodically inspect spa pools	(0)	(1)	55	54
Option 3.3: Treat spa pools like other pools	(0)	300	55	355
4. Portable pools				
Option 4.1 (recommended): Inform buyers of their obligations. Apply the Act to portable pools > 300mm. Do not require councils to periodically inspect portable pools	(0)	0	0	0
Option 4.2: Restrict the sale of portable pools to those with sides < 300mm, and those with non-climbable sides > 1.2m	(1)	Not quantified	Not quantified	Not quantified
5. Garden ponds				
Option 5.1 (recommended): Do not require owners to restrict access to garden ponds or other water hazards	0	0	(0)	(0)
Option 5.2: Councils to inspect garden ponds five-yearly. Not require owners to restrict access to other water hazards	(0)	3	3	6
Option 5.3: Apply the Act to garden ponds > 300mm but not to other hazards. Councils to inspect ponds five-yearly	(4)	15	24	40

* Numbers in brackets represent a reduction in drownings or cost.

117 MBIE has recommended options that are expected to:

- avoid an estimated six drownings every 10 years in council areas where pools have not been periodically inspected
- reduce compliance and administrative costs by an estimated \$17 million⁸
- improve clarity for pool owners and councils about their obligations.

118 The following table summarises the effect of the options recommended by MBIE:

	Effect on risk of drowning Drownings every 10 years	Compliance costs (savings) for owners \$ million NPV	Administrative costs (saving) for councils \$ million NPV	Certainty and consistency
Option 1.1: doors opening to pool areas installed in the future to meet the performance standard for restricting access	Not expected to significantly affect current risk	Not expected to significantly change costs	Not expected to significantly change costs	Clearer requirements ✓
Option 2.1: Inspect swimming pools five-yearly	Estimated to avoid six drownings every 10 years (on average) ✓✓✓	Not expected to significantly change costs	(Estimated \$4 million saving) ✓	Clearer requirements ✓
Option 3.1: provide that child-resistant spa pools adequately restrict access Do not require councils to locate and periodically inspect spa pools	Not expected to significantly affect current risk	(Estimated \$1 million saving) ✓	(Estimated \$11 million saving) ✓✓	Consistent requirements ✓
Option 4.1: Information to buyers about their obligations. Apply the Act to portable pools >300mm. Do not require councils to search for and periodically inspect portable pools	Not expected to significantly affect current risk	Not expected to significantly change costs	Not expected to significantly change costs	Clearer requirements ✓
Option 5.1: do not require owners to restrict access to garden ponds or other water hazards	Not expected to significantly affect current risk	Not expected to significantly change costs	Not expected to significantly change costs	Clearer requirements ✓
Total effect of recommended options	Estimated to avoid six drownings every 10 years (on average) ✓✓✓	(Estimated \$1 million saving)	(Estimated \$15 million saving)	Clearer requirements Consistent ✓

⁸ This total of \$17 million is the sum of \$1 million estimated savings for owners and \$15 million estimated savings for councils; this total does not add because of rounding.

Implementation

119 The proposals would be given effect by:

- legislation amending the Act
- regulations being prepared to implement the legislation
- councils and MBIE continuing to administer the Act
- MBIE continuing to respond to queries and make Determinations regarding installing pools in compliance with the Building Code.

120 There is a risk that the requirements concerning pools might need to change in future to reflect changes in the technology for pools or the means of restricting access. This risk is mitigated by relying on the performance-based approach of the Building Code, and putting detailed specifications in regulations or compliance documents rather than in primary legislation.

Monitoring, evaluation and review

121 Monitoring the successful implementation of changes to legislation would involve:

- monitoring the extent to which councils inspect pools and achieve compliance
- monitoring enquiries MBIE receives from owners and councils that might indicate problems with the Act.

122 Operational data from councils and drowning data from Water Safety New Zealand would provide a basis for any future review of the Act.

123 Drowning outcomes will be difficult to evaluate because of the low incidence of drowning in New Zealand. This difficulty is overcome in part by drawing on the experience of overseas jurisdictions.

References

Barker R, Heiring C, Spinks D and Pitt R (2008) *Domestic Pool Immersion in Queensland Children under 5 years of age*, Queensland Injury Surveillance Unit, No. 104 December 2008.
http://www.qisu.org.au/ModCoreFilesUploaded/Bulletin_10486.pdf

Barker R, Spinks D, Hockey R and Pitt R (2003) *Pool Fencing Legislation in Australia in 2003: The Way Forward*, Discussion Paper, Queensland Injury Surveillance Unit. National Water Safety Conference 2003, 107-110.
http://www.royallifesaving.com.au/_data/assets/pdf_file/0005/4010/2003_Conference_Program_final.pdf

Bay of Plenty Regional Council (2012) *Rotorua Lakes Ornamental Pond Monitoring*, in Operations, Monitoring and Regulation Committee Meeting 21 June 2012, 17-20.
http://www.boprc.govt.nz/media/216840/operations_monitoring_and_regulation_committee_meeting_agenda_-_thursday_21_june_2012.pdf

Bugeja L and Franklin RC (2012) *An analysis of stratagems to reduce drowning deaths of young children in private swimming pools and spas in Victoria, Australia*, International Journal of Injury Control and Safety Promotion, DOI:10.1080/17457300.2012.717086

Department of Building and Housing (2008) *Evaluation of the Fencing of Swimming Pools Act 1987*, Discussion document, Wellington.
<http://www.dbh.govt.nz/fencing-of-swimming-pools-discussion-document>

Department of Internal Affairs (1999) *Guidelines for Territorial Authorities on The Fencing of Swimming Pools Act 1987*. Wellington.
<http://www.dbh.govt.nz/UserFiles/File/AboutUs/Legislation/fencing/pool-guide.pdf>

Department of Internal Affairs (2005) *Addendum to "Guidelines for Territorial Authorities on The Fencing of Swimming Pools Act 1987"*. Wellington.
<http://www.dbh.govt.nz/UserFiles/File/AboutUs/Legislation/fencing/pool-guide-addendum.pdf>

Determination 2002/10 *Lockable cover as a safety barrier for a spa pool*. Building Industry Authority. Wellington.
www.dbh.govt.nz/UserFiles/File/Building/Determinations/2002/pdf/2002-10.pdf

Determination 2009/76 *Safety Barrier for a swimming pool*. Department of Building and Housing
<http://www.dbh.govt.nz/UserFiles/File/Building/Determinations/2009/2009-076.pdf>

Determinations 2010/35 *Dispute about a Notice to Fix for safety barriers to a swimming pool area*. Department of Building and Housing. Wellington
<http://www.dbh.govt.nz/UserFiles/File/Building/Determinations/2010/2010-035.pdf>

Gulliver P and Chalmers D (2006) *Fencing of swimming pools legislation: literature review* University of Otago, Dunedin.
http://www.watersafe.org.nz/_attachments/fosp-lit-review-mar2006.pdf

ISPSC (2012) *International Swimming Pool & Spa Code*
http://www.ispaca.com/index.php?option=com_content&view=article&id=126&Itemid=239

Kapiti Coast District Council (2011) *Stormwater Detention Ponds and the Fencing of Swimming Pools Act 1987*, report to Regulatory Management Committee meeting 4 August 2011, CS-11-249
[http://www.kapiticoast.govt.nz/Documents/Meetings/Current/Regulatory%20Management%20Committee%20\(RMC\)/2011/1013%2006%204%20August%202011/1013-06-RMC-OR-Stormwater-Detention-Ponds-and-Fencing-Swimming-Pools-Act-CS-11-249.pdf](http://www.kapiticoast.govt.nz/Documents/Meetings/Current/Regulatory%20Management%20Committee%20(RMC)/2011/1013%2006%204%20August%202011/1013-06-RMC-OR-Stormwater-Detention-Ponds-and-Fencing-Swimming-Pools-Act-CS-11-249.pdf)

Local Bills Committee (1983) *Report on the Fencing of Private Swimming Pools*, Appendices to the Journal of the House of Representatives I(10A).

Ministry of Business, Innovation and Employment (2013a) *Making Pool Safety Easier*, Wellington: proposed changes to the Fencing of Swimming Pools Act 1987. MBIE, Wellington.
www.dbh.govt.nz/consultingon-pools

Ministry of Business, Innovation and Employment (2013b) *Making Pool Safety Easier: Proposed changes to the Fencing of Swimming Pools Act 1987: Summary of submissions*. Wellington.
www.dbh.govt.nz/consultingon-pools

New South Wales Child Death Review Team (2012) *Child deaths: drowning deaths in private swimming pools in NSW*, NSW Ombudsman, Sydney.
www.ombo.nsw.gov.au/_data/assets/pdf_file/0019/5752/IP_CDRT01_Private-Swimming-Pools.pdf

New South Wales Department of Premier & Cabinet (n.d.) *Swimming Pools (Backyard)*, Web page. Accessed 13 November 2013. NSW Government.
http://www.dlg.nsw.gov.au/dlg/dlghome/dlg_policyindex.asp?areaindex=PLCYADV&documenttype=8&mi=6&ml=6&paid=37

New Zealand Standard NZS 8500:2006 *Safety Barriers and Fences around Swimming Pools, Spas and Hot Tubs*, Standards New Zealand.

Orlowski JP and Cramer CL (2012) *The drowning risks associated with visiting family or friends*, Journal of Pediatric Intensive Care 1 (2012) 1–5. DOI 10.3233/PIC-2012-006
<http://www.elevatinghealthcare.org/sites/default/files/field/Drowning%20Risk.pdf>

Paul D Champion PD and de Winton MD (2005) *Auckland urban pond surveys*, section 4.3 of Recommendations for management of Auckland Region's freshwater pests. Auckland Regional Council. July 2006 TP305
http://www.aucklandcity.govt.nz/council/documents/technicalpublications/TP305_Recs%20for%20Mgt%20of%20AKI%20FW%20pests_Nov%2005_d.pdf

Pearson J and Davies P (2000) *Drowning accidents in the garden involving children under the age of five*, Government Consumer Safety Research, Department of Trade and Industry. London
<http://www.humanics-es.com/drowning.pdf>

Queensland Department of Housing and Public Works (2012) *Pool Safety Inspector Guidelines*. Queensland Government.
<http://www.hpw.qld.gov.au/SiteCollectionDocuments/PoolSafetyInspectorGuideline.pdf>

Ragan, P, Schulte J, Vanderwerf-Hourigan, L (2006) *Florida Toddler Pool Drowning Deaths – Summary of Consumer Product Safety Commission (CPSC) Case Series Study*, Florida Department of Health.
<http://www.floridahealth.gov/prevention-safety-and-wellness/drowning-prevention/documents/cpsc-case-study.pdf>

Shields BJ, Pollack-Nelson C, Smith GA (2011) *Submersion Events in Portable Above-Ground Pools in the United States, 2001–2009*, Pediatrics. 2011 Jul;128(1):45-52.
<http://pediatrics.aappublications.org/content/128/1/45.abstract>

Simmonds E Vimalachandra D Cohen L and Douglass C (2010) *What do pool owners think about pool safety? An examination of the views of pool owners within two local councils in NSW*, The Children's Hospital at Westmead, Westmead.
http://kidshealth.chw.edu.au/sites/kidshealth.schn.health.nsw.gov.au/files/attachments/757/final_report.pdf

Stevenson MR, Rimajova M et al. (2003) *Childhood drowning: Barriers surrounding private swimming pools*. Pediatrics 111(2):e115-e119
<http://pediatrics.aappublications.org/content/111/2/e115.full.pdf+html>

Thompson DC, Rivara F (2010) *Pool fencing for preventing drowning of children*, (Review). The Cochrane Collaboration, Wiley.
<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001047/pdf/standard>

van Weerdenburg K, Mitchell R and Wallner F (2003) *Management of domestic swimming pools and compliance levels A comparison of approaches in three local government areas NSW*. Water Safety Taskforce.
http://www.watersafety.nsw.gov.au/media/admin/29/_/t9x1b59yitds0c0s0/